

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Signal Hill Generating LLC

AUTHORIZING THE OPERATION OF
Wichita Falls Cogeneration Plant
Fossil Fuel Electric Power Generation

LOCATED AT
Wichita County, Texas
Latitude 33° 51' 45" Longitude 98° 35' 15"
Regulated Entity Number: RN100216134

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: 092 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five-year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity

requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

6. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
7. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

8. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under

30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
9. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
10. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

11. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
12. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

13. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
 - B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Alternative Requirements

14. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

Permit Location

15. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

16. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Alternative Requirement

Applicable Requirements Summary

Unit Summary..... 10

Applicable Requirements Summary 11

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FWP-1	SRIC ENGINES	N/A	63ZZZZ-02	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GEN-1	SRIC ENGINES	N/A	63ZZZZ-02	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-COMPRESSRS	SRIC ENGINES	17, 18	63ZZZZ-02	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-QSBLR	BOILERS/ STEAM GENERATORS/ STEAM GENERATING UNITS	4, 5, 6	60Dc-01	40 CFR Part 60, Subpart Dc	No changing attributes.
GRP-STACK	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	1, 2, 3	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-TURB	STATIONARY TURBINES	1A, 2A, 3A	60GG	40 CFR Part 60, Subpart GG	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FWP-1	EU	63ZZZZ-02	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
GEN-1	EU	63ZZZZ-02	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(i) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
GRP-COMPRESS RS	EU	63ZZZZ-02	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.12 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(h) § 63.6640(b) § 63.6640(c)(7)	For each existing non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP that is not a remote stationary RICE and that operates more than 24 hours per calendar year, you must install NSCR to reduce HAP emissions from the stationary RICE.	§ 63.6612(a) § 63.6620(a) § 63.6620(a)-Table4.1.a.i § 63.6620(a)-Table4.1.a.ii § 63.6620(a)-Table4.1.a.iii § 63.6620(b) § 63.6620(d) § 63.6620(e)(1) [G]§ 63.6620(e)(2)	§ 63.6635(a) § 63.6635(c) § 63.6655(a) § 63.6655(a)(1) § 63.6655(a)(2) § 63.6655(a)(3) § 63.6655(a)(4) § 63.6655(a)(5) [G]§ 63.6655(b) § 63.6655(d) § 63.6655(e) § 63.6660(a)	§ 63.6640(b) § 63.6640(e) § 63.6645(a) § 63.6645(g) § 63.6645(h) § 63.6650(a) § 63.6650(a)-Table7.3 § 63.6650(b) § 63.6650(b)(1) § 63.6650(b)(2) § 63.6650(b)(3) § 63.6650(b)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 63.6625(b) § 63.6630(a)-Table5.14.a.i § 63.6630(a)-Table5.14.a.ii § 63.6630(e) § 63.6630(e)(1) § 63.6630(e)(2) § 63.6630(e)(3) § 63.6630(e)(5) § 63.6630(e)(6) § 63.6635(a) § 63.6635(b) § 63.6640(a) § 63.6640(a)-Table6.15.a.i § 63.6640(a)-Table6.15.a.ii § 63.6640(b) § 63.6640(c) § 63.6640(c)(1) § 63.6640(c)(2) § 63.6640(c)(3) § 63.6640(c)(5) § 63.6640(c)(6) § 63.6640(c)(7)	§ 63.6660(b) § 63.6660(c)	[G]§ 63.6650(c) [G]§ 63.6650(e) § 63.6650(f)
GRP-QSBLR	EU	60Dc-01	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
GRP-QSBLR	EU	60Dc-01	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						heat input capacity of 2.9-29 megawatts (MW).			
GRP-QSBLR	EU	60Dc-01	PM (Opacity)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
GRP-STACK	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six-minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRP-TURB	EU	60GG	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(4) **See Alternative Requirements	None	None
GRP-TURB	EU	60GG	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3) § 60.332(f) § 60.332(i)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	§ 60.334(a) § 60.334(g) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(i) [G]§ 60.335(a) § 60.335(b)(1) § 60.335(b)(2) § 60.335(b)(4) § 60.335(c)(1) ** See CAM Summary	§ 60.334(a) § 60.334(g)	§ 60.334(j) § 60.334(j)(3) § 60.334(j)(5)

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: GRP-TURB	
Control Device ID No.: GRP TURBINE SI	Control Device Type: Other Control Device Type
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Steam or Water Flow Rate	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: minimum steam to fuel consumption ratio of 0.837 at maximum load	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within $\pm 5\%$.	

CAM Summary

Unit/Group/Process Information	
ID No.: GRP-TURB	
Control Device ID No.: GRP TURBINE SI	Control Device Type: Other Control Device Type
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG
Pollutant: NO _x	Main Standard: § 60.332(a)(1)
Monitoring Information	
Indicator: Fuel Consumption	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Maximum Fuel Consumption Limit - 4000 scfm	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the fuel flow meter is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within $\pm 5\%$.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-STACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period	
Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation.	

Permit Shield

Permit Shield 19

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
FWP-1	N/A	40 CFR Part 60, Subpart IIII	Construction or modification/reconstruction was not commenced after 07/11/2005.
GEN-1	N/A	40 CFR Part 60, Subpart IIII	Construction or modification/reconstruction was not commenced after 07/11/2005.
GRP-COMPRESSRS	17, 18	40 CFR Part 60, Subpart IIII	The referenced engines are spark ignition, not compression ignition.
GRP-COMPRESSRS	17, 18	40 CFR Part 60, Subpart JJJJ	Construction or modification/reconstruction was not commenced after 06/12/2006.
GRP-INLTSCBR	T-101, T-102	40 CFR Part 60, Subpart Kb	Storage vessel capacity is not greater than or equal to 75 cubic meters (471.7 barrels) (19,813 gallons).
GRP-QSBLR	4, 5, 6	40 CFR Part 60, Subpart D	Heat input rate of each fossil-fuel fired steam generating unit is less than 250 MMBtu/hr.
GRP-QSBLR	4, 5, 6	40 CFR Part 60, Subpart Da	Electric utility steam generating units are not capable of combusting 250 MMBtu/hr heat input of fossil fuel.
GRP-QSBLR	4, 5, 6	40 CFR Part 60, Subpart Db	Heat input capacity for each quick-start boiler is less than 100 MMBtu/hr.
GRP-QSBLR	4, 5, 6	40 CFR Part 63, Subpart DDDDD	The Wichita Falls Cogeneration Plant is not a major source of HAPs as defined in 63.2.
GRP-QSBLR	4, 5, 6	40 CFR Part 63, Subpart JJJJJJ	The quick-start boilers are gas-fired boilers as defined in 63.11237 and therefore not subject to this subpart or any requirements of this subpart.
GRP-TURB	1A, 2A, 3A	40 CFR Part 60, Subpart KKKK	The stationary combustion turbines were constructed before, and have not been modified or reconstructed, since February 18, 2005.
GRP-TURB	1A, 2A, 3A	40 CFR Part 63, Subpart YYYY	The Wichita Falls Cogeneration Plant is not a major source of HAPs as defined in 63.2.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-202	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is not greater than or equal to 75 cubic meters (471.7 barrels) (19,813 gallons).

New Source Review Authorization References

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New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX685	Issuance Date: 06/26/2012
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 16750	Issuance Date: 06/26/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 5	Version No./Date: 11/05/1986
Number: 6	Version No./Date: 11/05/1986
Number: 8	Version No./Date: 11/05/1986
Number: 51	Version No./Date: 11/05/1986
Number: 66	Version No./Date: 11/05/1986
Number: 107	Version No./Date: 10/04/1995

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
17	NATURAL GAS COMPRESSOR	6/11/05/1986
18	NATURAL GAS COMPRESSOR	6/11/05/1986
1A	GAS TURBINE GEN. 1 WITH WASTE HEAT RECOVERY BOILER	16750, PSDTX685
1	GAS TURBINE/BOILER UNIT 1 STACK	16750, PSDTX685
2A	GAS TURBINE GEN. 2 WITH WASTE HEAT RECOVERY BOILER	16750, PSDTX685
2	GAS TURBINE/BOILER UNIT 2 STACK	16750, PSDTX685
3A	GAS TURBINE GEN. 3 WITH WASTE HEAT RECOVERY BOILER	16750, PSDTX685
3	GAS TURBINE/BOILER UNIT 3 STACK	16750, PSDTX685
4	BOILER 4	106.183/09/04/2000
5	BOILER 5	106.183/09/04/2000
6	BOILER 6	106.183/09/04/2000
FWP-1	FIREWATER PUMP	66/11/05/1986
GEN-1	EMERGENCY GENERATOR	66/11/05/1986
T-101	INLET SCRUBBER TANK 101	66/11/05/1986
T-102	INLET SCRUBBER TANK 102	66/11/05/1986
T-202	LUBE OIL TANK 202	66/11/05/1986

Alternative Requirement

Alternative Requirement..... 25



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

OCT 30 1996

Gerald N. Craig
President
Wichita Falls Energy Co., Ltd.
P.O. Box 9349
Fort Worth, TX 76147

Dear Mr. Craig:

Pursuant to 40 CFR § 60.334 (b)(2), the Environmental Protection Agency (EPA) has completed its review of your request dated April 23, 1996, for renewal of the Custom Fuel Monitoring Schedule (CFMS) that was issued to Wichita Falls Energy Investments, Inc. (WFEI) on September 30, 1991 for your three Ingersoll-Rand GT 61 gas fired turbines located in Wichita Falls, Texas. Your request for a revised CFMS is approved and is effective on the date of this letter. Please note that by this letter EPA is allowing WFEI to monitor for fuel sulfur content at the Phase III frequency (Semiannual sampling) and that the "length of stain tube" test method for sulfur has been added to the CFMS as an alternative testing option providing that the Gas Processors Association Standard 2377-86 is followed.

After the completion of each phase of the CFMS, please send EPA and the Texas Natural Resource Conservation Commission (TNRCC) a copy of your laboratory fuel sulfur content test results to ensure compliance with the terms of the CFMS and New Source Performance Standards (NSPS) Subpart GG. If you have any questions or need additional information, please contact Mr. Peter Goerdel at (214) 665-7294 or Mr. Ed Guice at (214) 665-7554, of my staff.

Sincerely yours,

Samuel Coleman
Samuel Coleman, P.E.
Director
Compliance Assurance and
Enforcement Division

Enclosure

cc: Mr. Jeff Greif, TNRCC
Ms. Jeanne Philquist, TNRCC
Ms. Winona Henry, Region 3, TNRCC

ENCLOSURE I

CFMS for Wichita Falls Energy Investments, in Wichita Falls, TX

The following CFMS is approved as an alternative to the monitoring requirements contained in § 60.334 (b)(2).

1. Nitrogen Monitoring

- a. Monitoring of fuel nitrogen content shall not be required while pipeline-quality natural gas is the only fuel fired in the gas turbine.
- b. Monitoring of fuel nitrogen content shall be determined and recorded daily, or by following the requirements of 40 CFR § 60.334, while firing a fuel other than pipeline-quality natural gas or while firing an emergency fuel as defined in 40 CFR § 60.331 (r).
- c. Should a nitrogen analysis, required for any reason other than firing an emergency fuel, demonstrate noncompliance with 40 CFR § 60.332, then the owner or operator shall immediately notify the Texas Natural Resource Conservation Commission (TNRCC) and Environmental Protection Agency (EPA) of the excess emissions, and the CFMS shall be re-examined by TNRCC and EPA. Nitrogen monitoring shall be conducted daily during the interim period when this CFMS is being re-examined.
- d. If there is a change in fuel supply, the owner or operator must immediately notify TNRCC and EPA of such change for re-examination of this CFMS. A change in fuel quality, fuel makeup or fuel supplier shall be considered as a change in fuel supply. Nitrogen monitoring shall be conducted daily during the interim period when this CFMS is being re-examined.

2. Sulfur Monitoring

- a. Analysis for fuel Sulfur content of the gas turbine fuel (natural gas or any other type of fuel) shall be conducted using the appropriate methods specified in 40 CFR§ 60.335 (d).
- b. The "length of stain tube" method is approved as an alternative fuel Sulfur test method for this CFMS, providing that the Gas Processors Association (GPA) procedures are followed and 100% pipeline-quality natural gas is the only fuel fired in the gas turbines. (GPA Standard 2377-86)

- c. Monitoring of fuel Sulfur content shall be determined and recorded daily, or by following the requirements of 40 CFR § 60.334, while firing an emergency fuel as defined in 40 CFR § 60.331 (r). Effective the date of this CFMS, the sampling and analysis frequency for fuel sulfur allowed under this CFMS fuel schedule is as follows:

<u>PHASE</u>	<u>FREQUENCY</u>	<u>PERIOD</u>
I	Biweekly ¹	Six Months
II	Quarterly	Eighteen Months
III	Semiannually	Two Years ²

If, during the period of each phase, this monitoring shows little variability in the fuel sulfur content and demonstrates continuous compliance with the emission limits for Sulfur Dioxide contained in 40 CFR § 60.333, the company may then proceed to the next sampling phase and provide the test results for the previous phase with written notice to TNRCC and EPA.

- d. Should a sulfur analysis, required for any reason other than for firing emergency fuel, demonstrate non-compliance with the emission limits for Sulfur Dioxide contained in 40 CFR § 60.333, the owner or operator shall immediately notify TNRCC and EPA of such excess emissions and sulfur monitoring shall be conducted daily during the interim period while this CFMS is being re-examined.
- e. If there is a change in fuel supply, the owner or operator must notify TNRCC and EPA of such change for re-examination of this CFMS. A change in fuel quality, fuel makeup or fuel supplier shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted daily during the interim period when this CFMS is being re-examined.

¹ Biweekly means once every other week.

² This monitoring shall be conducted during the first and third quarters of each calendar year.

3. General

- a. Approval of this CFMS is based on the application submitted by the company, dated April 23, 1996, for the firing of 100% pipeline-quality natural gas. Any change in any representation made by the company in this application shall cause this CFMS to be suspended and re-examination by TNRCC or EPA. TNRCC and EPA shall be notified immediately if any such change occurs.
- b. All analyses required by this custom schedule shall be performed by a laboratory using the approved test methods.
- c. The company may request that EPA allow for the substitution of any analytical method for another method specified in this CFMS. Any substitution will require the written approval of EPA.
- d. TNRCC and EPA may request that an audit of the fuel sampling program be conducted at any time during the life of this custom schedule. This audit shall consist of daily sampling of the fuel gas for either nitrogen content, sulfur content, or both. The length of this audit shall be no less than two weeks. If noncompliance values are found, paragraphs 1(c) and/or 2(d) shall govern.
- e. Records of sample analysis, fuel supplier, fuel supply, fuel quality, and fuel make-up pertinent to this custom schedule shall be retained for a period of two years, and be made available for inspection by personnel of federal, state, and local air pollution control agencies.
- f. After the initial four year term of the CFMS, the custom schedule will continue using the same monitoring, recordkeeping and notification requirements as stipulated in Phase III of the schedule. However, TNRCC OR EPA can choose to terminate the CFMS and require the company to reapply for a CFMS. Termination of the CFMS will require that the company begin sampling as required by 40 CFR §60.334.
- g. This CFMS supersedes all previous CFMS's issued for this facility.
- h. Date of issuance 10/28/96.

Appendix A

Acronym List 30

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 32

Major NSR Summary Table

Permit Numbers 16750 and PSDTX685					Issuance Date: June 26, 2012		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
1	Turbine A	NO _x	52.0	228	2, 4, 5, 7	2, 5, 7, 10	2, 7
		CO	32	140	2, 7	2, 7, 10	2, 7
		VOC	0.87	3.83	2	2, 10	2
		PM/PM ₁₀ /PM _{2.5}	1.04	4.57	2	2, 10	2
		SO ₂	0.06	0.26	2, 6	2, 6, 10	2
2	Turbine B	NO _x	52.0	228	2, 4, 5, 7	2, 5, 7, 10	2, 7
		CO	32	140	2, 7	2, 7, 10	2, 7
		VOC	0.87	3.83	2	2, 10	2
		PM/PM ₁₀ /PM _{2.5}	1.04	4.57	2	2, 10	2
		SO ₂	0.06	0.26	2, 6	2, 6, 10	2

Major NSR Summary Table

Permit Numbers 16750 and PSDTX685					Issuance Date: June 26, 2012		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
3	Turbine C	NO _x	52.0	228	2, 4, 5, 7	2, 5, 7, 10	2, 7
		CO	32	140	2, 7	2, 7, 10	2, 7
		VOC	0.87	3.83	2	2, 10	2
		PM/PM ₁₀ /PM _{2.5}	1.04	4.57	2	2, 10	2
		SO ₂	0.06	0.26	2, 6	2, 6, 10	2

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO
LDH Signal Hill LLC
AUTHORIZING THE CONTINUED OPERATION OF
Wichita Falls Cogeneration Plant
LOCATED AT Wichita Falls, Wichita County, Texas
LATITUDE 33° 51' 45" LONGITUDE 98° 35' 15"

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Chief Engineer's Office the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMIT 16750 & PSDTX685

Date: June 26, 2012

For the Commission

Special Conditions

Permit Numbers 16750 and PSDTX685

Emission Standards

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" and those sources are limited to the emission limits and other conditions specified in that attached table.
2. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart A, General Provisions, and Subpart GG, Standards of Performance for Stationary Gas Turbines.
3. The concentration of oxides of nitrogen (NO_x) in the stack gases from the turbine shall not exceed 107 parts per million by volume (ppmv) at 15 percent oxygen and on a dry basis, adjusted to international standards organization standard day conditions as specified in 40 CFR Part 60.335(b)(1).
4. The steam-to-fuel ratio necessary to comply with the concentration limit stated in Special Condition No. 3 shall be determined during the stack sampling required in Special Condition No. 7 and shall be determined during operation of the turbine at four points in the normal operating range of the turbine, including the minimum point in the range and peak load. All loads shall be corrected to 59°F, 60 percent relative humidity and 14.7 pounds per square inch absolute (psia) pressure using the appropriate equations supplied by the turbine manufacturer.
5. The holder of this permit shall inject steam into the combustion chamber of the gas turbine at the steam-to-fuel ratios established by the testing required in Special Condition No. 4. The permit holder shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of steam to fuel being fired in each turbine.

Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within $\pm 5\%$.

Any one-hour period of the turbine operation, except during start-up during which the steam-to-fuel ratios fall below the ratio determined in Special Condition No. 4, may, at the discretion of the Texas Commission on Environmental Quality (TCEQ), be used to determine violations of the emission limitations of Special Condition No. 3.

6. Fuel for the gas turbines is limited to sweet natural gas containing no more than 0.2 grain total sulfur per 100 dry standard cubic feet of gas. Fuel shall be monitored as described in 40 CFR § 60.334(h) or according to a custom fuel monitoring schedule previously approved by the EPA.

Initial Demonstration of Compliance

7. Initial demonstration was performed on July 27, 28, and 29, 1987.

The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from Emission Point Nos. 1, 2, and 3. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods including Reference Method 8 or Reference Method 6 or 6c for sulfur dioxide (SO₂); Reference Method 10 for the concentration of carbon monoxide (CO); and Reference Method 20 for the concentrations of NO_x and oxygen (O₂) or equivalent methods.

Fuel sampling using the methods and procedures of 40 CFR Part 60.335(b)(10) may be conducted in lieu of stack sampling for SO₂. If fuel sampling is used, SO₂ limits shall be based on 100 percent conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the TCEQ Regional Director prior to sampling. The TCEQ Regional Director or his designated representative shall be afforded the opportunity to observe all such sampling.

- A. Air contaminants to be tested for include (but are not limited to) NO_x and CO.
 - B. Sampling shall occur within 60 days after the facility achieves maximum production, but no later than 180 days after initial start-up of the facility and at other such times as may be required by the Executive Director of the TCEQ.
 - C. The TCEQ Regional Office shall be notified at least 45 days prior to sampling in such a manner that a representative of the TCEQ may be present during sampling and the notice shall include:
 - i. Date for pretest meeting
 - ii. Date sampling will occur
 - iii. Name of firm conducting sampling
 - iv. Type of sampling equipment to be used
 - v. Method or procedure to be used in sampling
8. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.

Standard Exemptions

9. The following sources are claimed under standard exemptions and/or permits by rule:

Emission Source	Source Description	Authorization	Authorization Date
17	Compressor A	Standard Exemption No. 6	11/05/1986
18	Compressor B	Standard Exemption No. 6	11/05/1986
FUG-1	Fugitive Emissions	Standard Exemption No. 66	11/05/1986
L-1	Loading Emissions	Standard Exemption No. 51	11/05/1986
T-101	Inlet Scrubbers	Standard Exemption No. 66	11/05/1986
T-102	Inlet Scrubbers	Standard Exemption No. 66	11/05/1986
T-201	Lube Oil Storage Tank	Standard Exemption No. 66	11/05/1986
T-202	Lube Oil Storage Tank	Standard Exemption No. 66	11/05/1986
CT-1	Cooling Tower	Standard Exemption No. 8	11/05/1986
GEN-1	Emergency Generator	Standard Exemption No. 66	11/05/1986
FWP-1	Firewater Pump	Standard Exemption No. 66	11/05/1986
4, 5, 6	Quickstart Steam Boilers	30 TAC 106.183	9/4/2000
Tank 8	Tank	Standard Exemption No. 66	11/05/1986
	Change of Service	Registration No. 78918	5/30/2006

Recordkeeping

10. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:

- A. Records from the continuous fuel flow monitor for each turbine;
- B. Records from the continuous steam-to-fuel ratio monitor;
- C. Hourly records of emissions for each pollutant and the underlying basis for such calculations. NO_x emissions must be based on the measured fuel flow (or a stack flow meter) and steam-to-fuel ratio, at a minimum. A continuous emission monitoring system (CEMS) operated under 40 CFR Part 60 or Part 75 is also acceptable;
- D. Monthly records of emissions. The record for the most recent month shall be available no later than the 10th day of the current month; and
- E. A summation of the previous 12-months of emissions kept on a month by month basis.

Dated June 26, 2012

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 16750 and PSDTX685

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1	Turbine A	NO _x	52.0	228
		CO	32	140
		VOC	0.87	3.83
		PM/PM ₁₀ /PM _{2.5}	1.04	4.57
		SO ₂	0.06	0.26
2	Turbine B	NO _x	52.0	228
		CO	32	140
		VOC	0.87	3.83
		PM/PM ₁₀ /PM _{2.5}	1.04	4.57
		SO ₂	0.06	0.26
3	Turbine C	NO _x	52.0	228
		CO	32	140
		VOC	0.87	3.83
		PM/PM ₁₀ /PM _{2.5}	1.04	4.57
		SO ₂	0.06	0.26

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

Emission Sources - Maximum Allowable Emission Rates

- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

Date: June 26, 2012